CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 88-140

UPDATING WASTE DISCHARGE REQUIREMENTS FOR:

SAN MATEO COUNTY DEPARTMENT OF GENERAL SERVICES GLENWOOD BOYS RANCH LA HONDA, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter Board, finds that:

- 1. San Mateo County Department of General Services and Glenwood Boys Ranch, hereinafter discharger, submitted a Report of Waste Discharge dated April 15, 1988 for renewal of Waste Discharge Requirements. Additional information was submitted by a letter dated June 16, 1988 at the request of Board staff.
- 2. Currently, approximately 1500 gallons per day (gpd) of sewage from about 15 to 25 staff and 35 to 40 students is being treated by a packaged extended aeration treatment plant which was built in 1961. The treatment plant has a design capacity of 11,000 gpd.
- Treatment consist of comminuter, aeration tank, settling tank, chlorination facilities, effluent storage pond, and spray disposal fields.
- 4. Treated sewage is held in a rectangular storage pond which was installed in 1980. The pond is ten feet deep and has a capacity of about one million gallons. The storage pond is equipped with about eight spray heads. Water is pumped from the center of the pond through the spray heads back into the pond to enhance evaporation. Prior to the onset of rain in the fall, the pond is pumped down to a depth of five feet. Pumping to the sprayfield typically takes place intermittently over a two week period in September of each year. If the winter is exceedingly wet, one additional pumping period may be necessary during a dry period in the wintertime.

The spray field is located at the top of an adjacent hill. It is inaccessable being located in the center of a dense stand of poison cak. The spray disposal fields covers about 60,000 square feet. There are warning signs at the treatment plant, the storage pond, and the spray disposal fields. Attachment 1 shows the location of the spray disposal fields and is a part of this Order.

- 5. A small amount of sludge from the settling tank is placed in a pit near the plant twice a year. No removal has been necessary to date.
- 6. The discharger is within the watershed of Mindego Creek which drains into Alpine Creek and then San Gregorio Creek. The Redwood Terrace Mutual Water Company which serves 28 homes takes drinking water from San Gregorio Creek downstream of the discharger.
- 7. The discharge is presently governed by Order No. 80-31 (Waste Discharge Requirements), which allows spray disposal.

- 8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for San Gregorio Creek and contiguous waters.
- 9. The beneficial uses of San Gregorio Creek and contiguous water bodies are:

Water contact and non-contact recreation Wildlife habitat Warm and cold fresh water habitat Fish migration and spawning Preservation of rare and endangered species Agricultural water supply

- 10. This project involves the operation of existing publicly-owned sewage treatment and disposal facilities with negligible or no expansion of use beyond that previously existing and as such is exempt from the provisions of the California Environmenta Quality Act (CEQA) in accordance with Title 14, California Administrative Code, Chapter 3, Section 15301.
- 11. The discharger and interested agencies and persons have been notified of the Board's intent to issue revised requirements for the existing discharge and have been provided with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

- 1. There shall be no bypass or overflow of sewage from the collection, treatment, or disposal system to waters of the State.
- 2. The average dry weather flow shall not exceed 11,000 gpd. Average flow shall be determined over three consecutive dry weather months each year.
- 3. No wastewater effluent shall be applied to the effluent spray disposal area during periods of rainfall, when rainfall is anticipated, or for 48 hours after rainfall.
- 4. The waste shall not be allowed to escape from the effluent disposal area into waters of the State via surface flow, resurfacing after percolation, or airborne spray.
- 5. No wastewater shall be applied to the effluent spray disposal area when soils are saturated to a point where effluent runoff is likely.
- 6. Wastewater ponding which could provide a breeding area for mosquitoes is prohibited.

- 7. Wastewater effluent shall not be applied to the effluent disposal area whenever Specifications B.1. and/or B.2. are not being met.
- 8. The collection, treatment and disposal of wastewater shall not impair ground water quality.

B. Specifications

1. Waste at any place within one foot of the holding pond surface shall not exceed the following limits:

In any grab sample:

Dissolved Oxygen 2.0 mg/l minimum
Dissolved Sulfides 0.1 mg/l maximum
6.0 minimum
9.0 maximum

2. Waste effluent, as discharged to the effluent spray disposal area, shall meet the following limit at all times:

In any grab sample:

5-day BOD 40 mg/l maximum

- 3. At some point in the treatment process, waste effluent shall be disinfected by maintaining a chlorine residual of at least 0.5 mg/l for a period of at least 30 minutes.
- 4. A minimum freeboard of two feet shall be maintained in the holding pond at all times.
- 5. Wastewater disposal shall be limited to the area specified in Finding 4 of this Order unless written authorization is obtained from the Board's Executive Officer for the use of additional area.
- 6. The public shall be effectively excluded from the treatment plant, holding pond, and effluent disposal area. These areas shall be clearly identified with posted notices to the public. The method and form of notification and exclusion shall be subject to the review and approval of the Executive Officer.
- 7. All equipment including pumps, pipings, valves, etc. which may at any time contain wastes shall be adequately and clearly identified with warning signs and the discharger shall make all necessary provisions, in addition, to inform the public that the liquid contained therein is wastewater and is unfit for human consumption.
- 8. The treatment plant and holding pond shall be protected from erosion, washout, and flooding from the maximum flood having a predicted frequency of once in 100 years.
- 9. The holding pond shall have sufficient capacity to contain all wastewater generated from the facility during the period from

November 1 through March 31 during the wettest rainfall period expected once in ten years. Spray field disposal may be allowed during this period if Prohibitions A.3., A.4., and A.5., and Specifications B.1. and B.2. are met.

10. The disposal area shall have sufficient capacity to dispose, during the period from April 1 through October 30, of all waste received during the wettest year in ten years.

C. Provisions

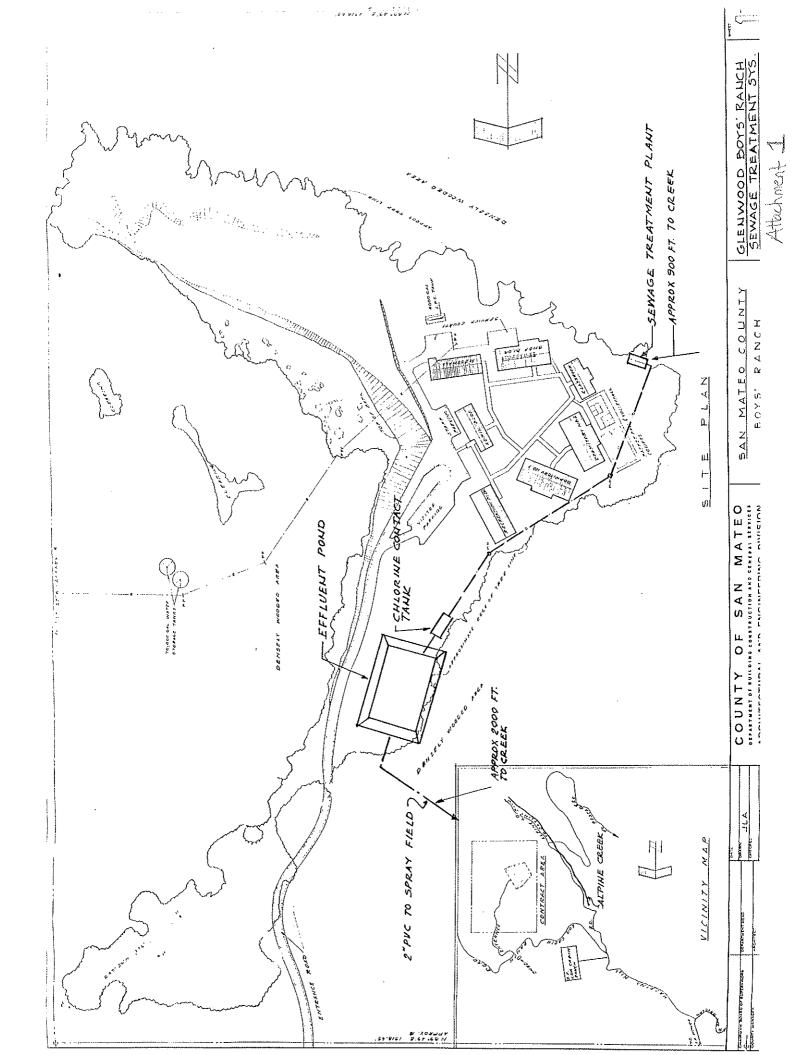
- 1. The discharger shall comply with all sections of this Order immediately upon adoption.
- 2. In reviewing compliance with Prohibitions A.3., A.4., and A.5., the Board will take special note of the difficulties encountered in achieving compliance during entire wet seasons having more rainfall than the maximum expected once in ten years.
- 3. The discharger shall review and update his Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Board by April 15 of each year. Documentation of operator input and review shall accompany each annual update.
- 4. The Board will review this Order periodically and may revise the requirements when necessary.
- 5. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
- 6. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements", dated December 1986, except items A.6., A.7., C.6., C.8., and C.11.
- 7. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 80-31. Order No. 80-31 is hereby rescinded.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on September 21, 1988.

STEVEN R. RITCHIE Executive Officer

Attachments:

Standard Provision and Reporting Requirements, December 1986 Self-Monitoring Program



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR

San Mateo County Department of General Services
Glenwood Boys Ranch
San Mateo County
ORDER NO. 88-140
CONSISTS OF
PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E	At a point between the sewage treatment plant and the holding pond after the plant effluent has been disinfected.
Н	At a point in the holding pond within 1 foot of the surface at least 25 feet from the discharge from the treatment plant.
s	At a point in the pipe from the holding pond to the spray field or just before discharge on the spray field.
Il thru In	Every 200 feet along the down slope side of the spray area.
Pl thru P4	At each corner of the sewage treatment plant.

II. SCHEDULE OF SAMPLING AND ANALYSIS

- A. The schedule of sampling and analysis shall be that given as Table I.
- B. Written reports shall be filed for each calendar month.

III. NOTIFICATION

The discharger shall promptly notify the Regional Board, San Mateo County Health Department, and the Redwood Terrace Mutual Water Company if wastewater is found flowing off the spray disposal area in violation of the Regional Board's Waste Discharge Requirements.

- I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:
- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 88-140.
- 2. Is effective on the date indicated below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and

revisions will be ordered by the Executive Officer.

STEVEN R. RITCHIE Executive Officer

Effective Date

Attachment: Table 1

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

SCHED	יוד ביור	ואם אכ	ILLLITIN		L th		P1 th		SIS				
Sampling Station	.E		Н	s	Ln		PI CI	iru				ļ	-
Don't July Double	1	1			1,1,1		FG						
TYPE OF SAMPLE	C-6	G	G	G	0		0		1			i	
										1			
Flow Rate (mgd) BOD, 5-day, 20°C, or COD	Cont												
(mg/1 & kg/day)	2W			2W	İ					l	ļ	- 1	1
(mg/l & kg/day) Chlorine Residual & Dos-					 								
age (mg/l & kg/day)		D							1	-	- 1	- 1	
age (mg/l & kg/day) Settleable Matter		D											
(ml/1-hr. & cu. ft./day) Total Suspended Matter				l									
Total Suspended Matter													
(mg/l & kg/day) Oil and Grease					ļ								
Ull and Grease				1							ı		
(mg/l & kg/day) Coliform (Total or Fecal)				 	 			 					
(MPN/100 ml) per reg't		2W		1					1		1	- 1	
Fish Tox'y 96-hr.					 								
(MPN/100 ml) per reg't Fish Tox'y 96-hr. % Surv'l in undiluted waste				L	1		<u> </u>	l					
Ammonia Nitrogen					1		i						
(mg/l & kg/day) Nitrate Nitrogen				<u> </u>	1	<u> </u>	 						
Nitrate Nitrogen	,				1	1				1	l		İ
(mg/l & kg/day) Nitrite Nitrogen	!	 		 	1	ļ	ļ	}					
(mg/l & kg/day)				l	1	į							ı
(mg/l & kg/day) Total Organic Nitrogen	 			 	 	 	 	l					
(mg/l & kg/day)					1	1							- 1
(mg/l & kg/day) Total Phosphate					1								
[(mg/l & kg/day)				<u> </u>	<u> </u>	<u> </u>	<u> </u>						
Turbidity		٠.		1	1		l						
(Jackson Turbidity Units)	ļ	}		 	- 	ļ	 						
pH (units)			2W]					
Dissolved Oxygen	 			 		 	 	 					
(mg/l and % Saturation)		2W	2W	1	1								
Temperature				1									
(°C)	1				<u> </u>		<u> </u>						
Apparent Color		1	D	1	1	1		<u> </u>				}	
Secchi Disc	 	 	- U	 	 		 	 				 	
(inches)	1		·	1		1	1	1		1		. '	ĺ
Sulfides (if DOX5.0 mg/l)	, 	 	 	 	- 	1	1	1		 	 	 	İ
Total & Dissolved (mg/1)	1	2W	2W	1	1	1							<u> </u>
Arsenic	1	1	1	1		1	1	1					
(mg/l & kg/day)	1	1		1			1			<u> </u>	ļ	ļ	
Cadmium	ſ									ł		1	1
(mg/l & kg/day)	 		ļ	 		 			 	 	ļ	ļ	
Chromium, Total	1	1		1	1	1	1	1		Į.			
(mg/l & kg/day) Copper	-	 	 	 	 		 	1	 	 	 	 	1
(mg/1 & kg/day)	1			1	1	1	1			1	1		
Cyanide	1	1	1	1		1	1			1	1	Ī	
(mg/1 & kg/day)		1								1	<u> </u>	 _	
Silver												1	1
(mg/1 & kg/day)	<u> </u>	.	 			4	 	.	 	1	 	 	
Lead		1				-	1	1		1		1	1
(mg/l & kg/day)		1	1	1			1	_1	<u> </u>	1	1	1	1

TABLE I (continued) SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

P 11 P111	T		1		L1 thru Ln.		P1 th	ru			
Sampling Station	E		Н	S			P4				
TYPE OF SAMPLE			0	:	0		0				
Mercury (mg/l & kg/day)											
Nickel (mg/l & kg/day)									 		
Zinc (mg/l & kg/day)											
PHENOLIC COMFOUNDS (mg/l & kg/day)											
All Applicable Standard Observations		[• 	D		_D 1		D				
Bottom Sediment Analyses and Observations											
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)					·						
*											
-											
*					1					,	

LEGEND FOR TABLE

TYPES. OF SAMPLES

G = grab sample

C-24 = composite sample - 24-hour

C-X = composite sample - X hours

(used when discharge does not continue for 24-hour period)

Cont = continuous sampling

DI = depth-integrated sample

BS = bottom sediment sample

0 = observation

TYPES OF STATIONS

I = intake and/or water supply stations

A = treatment facility influent stations

E = waste effluent stations

C = receiving water stations

P = treatment facilities perimeter stations

L = basin and/or pond levee stations

B = bottom sediment stations

G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurence

H = once each hour

.D = once each day

· W = once 'each week

· · M = once each month

· Y = once each year

2/H = twice per hour

2/W = 2 days per week

5/W ≈ 5 days per week

2/H = 2 days per month

2/Y = once in March and

once in September

Q = quarterly, once in March, June, Sept.

and December

211 = every 2 hours

2D = every 2 days

2W = every 2 weeks

 \cdot 3M = every 3 months

Cont = continuous

⁽¹⁾ On each day when spray application occurs.